Telecommunications Industry Solutions (ATIS), formerly the Exchange Carrier Standards Association (ECSA). In this capacity, I have been elected to the position of Interexchange Carrier Representative to the T1 Advisory Group, which advises and manages the technical subcommittee work of T1. In addition, I am also MCI's representative to the Network Operations Forum (NOF) and Industry Carriers Compatibility Forum (ICCF), industry fora responsible for operational and technical interconnection-related issues, respectively. The NOF and ICCF are industry fora under the Carrier Liaison Committee (CLC), which provides oversight management of the ATIS/CLC forums. I also represent my company at Carrier Liaison Committee (CLC) meetings to address issues relevant to the NOF and ICCF. Further, I am MCI's representative to the Electronic Communications Service Provider (ECSP) Committee, another ATIS sponsored organization that develops technical solutions for electronic surveillance

3. In addition, from 1987 to 1990, I was employed by Ameritech Services Inc., as a manager in Common Channel Signaling (CCS) planning. In that capacity, I was closely involved with Signaling System No. 7 (SS7) issues for the Ameritech region and was Ameritech's national representative for SS7 standards activity. I also coordinated Ameritech's position on Bellcore generic requirements for SS7-based services. Also, while employed at Ameritech, I served as the Vice-Chair of the Bell Operating Company (BOC) CCS Support Group and as a member of the US Telephone Association (USTA) Common Channel Signaling Study Group, both of which dealt with national SS7 planning

at Illinois Bell Telephone and was employed in various network planning, engineering and operational assignments. I have over 25 years of telecommunications experience.

- 4. I am submitting this affidavit in connection with the proceedings in the Commission docket captioned <u>Computer III Further Remand</u>

  <u>Proceedings: Bell Operating Company Provision of Enhanced Services</u>, Docket

  No. 95-20. If called to testify, I would be competent to testify to the facts stated in this affidavit.
- carrier request for delivery of Carrier Identification Code (CIC) information on domestic SS7 calls since it was first brought to the ICCF SS7 Workshop in 1988, including the sequence of events concerning MCI's request for its development and implementation. In addition, I have personally been involved in the technical review of various Bellcore documentation, the Technical Advisories (TA), and Technical Requirements (TR), which have now been replaced by Bellcore's Generic Requirements (GR) process. This affidavit addresses the reply comments filed by Bellcore<sup>1</sup> in this docket on behalf of the BOCs, its clients, concerning the SS7 Carrier Identification Code capability and the generic requirements process.

<sup>&</sup>lt;sup>1</sup> Reply Comments of Bell Communications Research, Inc., dated May 19, 1995 (hereafter, "Bellcore Reply Comments") and Affidavit of Joan T. LaBanca attached (hereafter, "LaBanca affidavit").

The Bellcore Reply Comments and LaBanca Affidavit are 6. inaccurate in asserting that the forums and standards process cannot be used to stall developments and implementations <sup>2</sup> It is my experience that these industry bodies can delay the availability of technical capabilities. MCI's CIC delivery example is a model case of BOC obstructionism because it demonstrates how the BOCs can direct the outcome that they desire through being able to control outcomes in standards committees and the fora, by controlling how capabilities are specified in Bellcore's requirements, and by controlling when and whether a solution will be implemented. After over seven years of persistent effort to obtain CIC delivery, and despite Bellcore's claim that the approach of using a new SS7 parameter was simpler. 3 the implementation of CIC delivery is still uncertain in terms of whether its delivery will be uniform and ubiquitous, or whether it will even be implemented at all. 4 Although some of the BOCs and other local exchange carriers (LECs) have finally demonstrated a willingness to implement the CIC delivery mechanism, as illustrated in Attachment 1, several LECs continue to delay the CIC delivery capability by requiring unrealistic remuneration, despite the fact that GTE and Sprint have tariffed the capability at no charge.

<sup>&</sup>lt;sup>2</sup> Bellcore Reply Comments at 3.

<sup>&</sup>lt;sup>3</sup> ld at 7.

<sup>&</sup>lt;sup>4</sup> Attachment I is a listing of inputs from the BOCs, as related to MCI's National Carrier Initiatives organization, which provides the BOCs' implementation status as of January 1996 for CIC delivery via the SS7 Carrier Identification Code parameter (CIP). MCI conducts various reviews with the BOCs for access capabilities. CIP is a prioritized access capability initiative for which MCI conducts regular status checks with the access providers.

CIC DELIVERY WITH THE SS7 CARRIER IDENTIFICATION
CODE PARAMETER (CIP) IS NOT TECHNICALLY SUPERIOR
BUT MERELY SUITED TO BOC BUSINESS INTERESTS

- 7. The SS7 CIC delivery issue discussed in the Affidavit of Peter P. Guggina, attached as Exhibit B to MCI's comments in CC Docket 95-20, and in Bellcore's response on behalf of its clients, is analogous to the problems that would be encountered by enhanced service providers (ESPs) in obtaining similar development commitments from the BOCs. MCI and the other interexchange carriers (IXCs) are as dependent as ESPs on interconnection with the BOCs' network capabilities and open access.
- 8. MCI made an initial request to the BOCs back in 1988 for a CIC delivery mechanism using the existing multi-frequency (MF) signaling protocol. This capability was requested to identify the "CIC-code" in the FG-D signaling information delivered to access customers at the signaling interface. CIC delivery would allow IXCs, for example, to provision universal trunk groups and eliminate the need to segregate traffic in order to identify service or reseller traffic usage. When MCI first requested that this capability be developed during one-on-one discussions with the BOCs, the BOCs convinced MCI that the delivery of CIC information would best be met by the impending implementation of interLATA SS7 signaling. MCI, supported by other IXCs, then formally requested the inclusion of SS7 CIC delivery within the BOCs' SS7 interface specification, which was being reviewed in the ICCF.

<sup>&</sup>lt;sup>5</sup> See correspondence provided as Attachment II containing LEC responses to MCI's requests to obtain a CIC delivery mechanism.

In particular, MCI requested that CIC information be 9. delivered to IXCs in the SS7 protocol by modifying the procedures for an existing SS7 parameter, the Transit Network Selection parameter (TNS). The TNS parameter was already being planned for interLATA SS7 signaling to enable international call setup. The TNS parameter contained the CIC code of the international carrier when international calls were forwarded by the LECs to IXCs. So, when the call containing a TNS parameter was delivered to a noninternational carrier, the TNS enabled that non-international IXC to select the international carrier to complete the call. MCI's request was for the TNS utility to be expanded so that CIC information could be transmitted to IXCs on all calls, whether domestic or international. MCI was aware when making this request that changes would be required in end-offices and tandem switches to deliver this capability, but was never told that its TNS request was technically infeasible. The upshot of this request was that the BOCs would not agree to using the TNS parameter; they insisted that a new signaling parameter had to be developed in standards. The BOCs' refusal prolonged the development and availability of a capability to meet the IXCs' request. A new SS7 signaling parameter then needed to be developed and included in the SS7 standards; this new signaling element became known as the Carrier Identification Code Parameter, or CIP.

10. Bellcore claims<sup>6</sup> that using the SS7 CIP parameter to deliver CIC information is simpler than using the TNS parameter would have been.

What Bellcore fails to mention in its comments is the fact that by engineering a

Belicore Reply Comments at 7.

new SS7 parameter (i.e., CIP) to deliver CIC information, the only aspect that is "simpler" is that it is easier for the BOCs to apply a usage-based charging mechanism for sending this information, and to recover for its transmission over and above that revenue already recovered for Feature Group D access. It would have been perfectly possible for the BOCs to perform call setup using TNS to deliver the CIC information as MCI had requested. The BOCs would have had a difficult time using TNS as a billing indicator, however, because they would have had to continue using it during normal call setup for international calls, without any additional charge, while at the same time, imposing a separate additional charge for its delivery to IXCs on domestic calls and distinguishing between the two in their billing systems. Thus, because the BOCs expected a separate recovery for delivering CIC information on domestic calls, it became "simpler" for them to design a new parameter for sending it on such calls. Using CIP ensured a vertical service recording and charging mechanism for the BOCs. because its transmission for domestic SS7 call setup messages could be counted at the SS7 interface to the interexchange carriers should they ever decide to implement CIC delivery.

11. Further demonstration that MCI's request to deliver CIC information via the TNS parameter was a logical solution can be made using Bellcore's own documentation concerning a related issue. Currently, network providers are working to define technical approaches to enable local number portability. One of the technical alternatives proposed by some BOCs and Bellcore is a capability known as Release-To-Pivot (RTP). It is this capability

which supports MCI's TNS claim. Bellcore has published a technical specification<sup>7</sup> which, in part, specifies that when the transmission of CIC information via SS7 signaling is necessary to support RTP -- a BOC defined capability -- it should be performed by sending the TNS parameter, and not the CIP parameter, between networks. This appears to be in direct conflict with Bellcore's position on the TNS vs. CIP issue. It is unclear how TNS for MCI's request was unsuitable, yet perfectly suitable to meet the BOCs' RTP capability needs.

because it was a technically better approach, and its implementation would be less disruptive." <sup>8</sup> This is an after-the-fact rationalization to support a decision made on financial self-interest grounds by the BOCs and Bellcore to prevent CIC delivery via the TNS parameter. There is no proof that TNS was a technically inferior solution. Bellcore is correct that the standards debate ostensibly centered on whether TNS or another new parameter (CIP) was most technically optimal, but it was clear from the standards discussions that the BOCs refused to consider the use of the TNS parameter for CIC delivery on domestic calls. And because the discussion was conducted in the standards working group sessions, the BOCs controlled the "consensus." The T1 voting process was irrelevant at this juncture because the BOCs were able to control the issue in the working

<sup>&</sup>lt;sup>7</sup> Bellcore Generic Requirements for the Signaling System 7 (SS7) Release-To-Pivot (RTP) Network Capability, GR-2857-CORE.

<sup>&</sup>lt;sup>8</sup> Bellcore Reply Comments at 7.

group, where voting does not occur. The working group uses the consensus process to determine the outcome of issues which are susceptible to numerical dominance by the RBOCs, Bellcore and USTA, to determine the outcome of issues in their favor. During these discussions, the equipment vendors were silent and did not express a preference, so as not to alienate either customer group (BOCs or the IXCs) debating the TNS vs. CIP issue.

- the BOC/Bellcore SS7 interconnection specification and then arguing the same issue in standards, interexchange carriers had no choice but to either drop the issue or accept the CIC information capability designed as a new parameter. Technically, it is true that there was a "consensus" to deliver CIC information on domestic calls only via a new parameter, but this was only because the BOCs were able to determine that outcome and force it upon other industry segments.
- significant changes beyond just 'modifying an existing signaling element'" is incorrect. The CIP approach forced on the IXCs by the BOCs made the solution more difficult, not simpler. The CIP solution also requires changes in every BOC switch to generate the new parameter. Bellcore is mistaken in stating that, because the TNS solution required switch software changes and administrative procedures to determine to which network the CIC information should be delivered, it would have been inferior. Both solutions require software changes

<sup>9</sup> LaBanca Affidavit at 1.

in the switches, end-offices and tandems. If Bellcore's argument were true, it would seem reasonable to assume that the CIP solution advocated by the BOCs would have been simple to implement and at little or no cost. That, however, is not what the BOCs have stated during implementation discussions.

designed parameter for providing CIC information to carriers, the parameter could be tailored to the need, (i.e., provide only needed CIC information) and procedures associated with it could be straightforward. My experience is that the opposite has been true. Despite Bellcore/BOC claims, CIP has turned out to be more complex because the BOCs have not designed the Bellcore requirements to meet the needs expressed by the interexchange carriers. First, even after the standards work was complete, the BOCs were uncooperative and raised various excuses for not proceeding further. In response to the BOCs' slow-rolling, the IXCs developed and delivered an access requirements document for CIC delivery via the CIP parameter in two weeks, and formally delivered it to the BOCs at ICCF #22 in March of 1991.

<sup>&</sup>lt;sup>10</sup> Bellcore Reply Comments at 7.

Attachment III provides the Exchange Carrier report to ICCF #21 in November, 1990 in response to MCI's request for a status of CIP implementation. Attachment IV provides the Interexchange Carrier report to ICCF #21, stating their continuing collective need for the capability.

The Interexchange Carriers Industry Committee (ICIC), a trade association of interLATA carriers, provided its access requirements for SS7 CIP to the BOCs via the ICCF in March 1991. The ICIC document provided the technical details for CIP delivery to meet the needs of interexchange carriers to receive CIC information for all domestic calls. The ICIC Access Requirements document for CIP is provided as Attachment V.

forum discussions and in comments to Bellcore on their switch specifications, IXCs again expressed the requirement for CIP to be delivered on all calls. When Bellcore's initial requirements were written, however, they specified the delivery of CIP only on "all-SS7" connections, thus failing to address the situation of interworking within the BOC network, i.e., when MF signaling coexists with SS7.

requirements be revised to deliver CIP whenever the access connection interworked MF with SS7, but the BOCs decided against meeting this need. 

Instead, the BOCs decided that the CIP delivery requirements when MF-SS7 interworking occurred would be optional and not mandatory. Thus, it became uncertain as to whether BOC equipment vendors would develop CIP delivery software when the access connection was interworked MF-to-SS7. This decision seems particularly arbitrary, since the BOC switches already accommodate CIC information delivery in the TNS parameter for interworked MF-SS7 international calls. If the BOCs had agreed to use TNS instead of CIP, the MF to SS7 interworking functionality would have already been available. Hence, the BOCs' decision has made CIC delivery more complex and difficult because interexchange carriers will not be assured of a uniform implementation of MF-SS7 interworking capabilities. In order for CIC code information delivery

<sup>&</sup>lt;sup>13</sup> The ICIC also provided comments to Bellcore on its switch specifications (TR-NWT-000394) addressing ICIC concerns on CIP development and the failure of the requirements to support CIC delivery in the MF-SS7 environment. See correspondence (Attachment VI) between the ICIC and Bellcore on this issue.

to be of benefit to IXCs, the information must be ubiquitous and available on all calls. Experience with BOC CIP deployment information demonstrates that CIP will not be universally available, thus resulting in a more complex and potentially useless solution.

17 The manner in which the BOCs have addressed CIC information delivery and the availability of other new capabilities -- especially in light of the inconsistent approaches they have taken as to the use of the TNS parameter for CIC delivery, on the one hand, and local number portability, on the other -- thus appears to be determined more by their business strategies than by the needs of their customers or by inherent technical feasibility. The BOCs were well aware that IXCs would be able to construct more efficient networks if there were a CIC delivery mechanism, and that such efficiencies could result in reduced BOC access revenues. In addition, IXCs would be able to develop new services using the CIC information, which could impact BOC abilities to compete eventually as interLATA carriers. The BOCs' strategy for rolling out interLATA SS7 signaling had been for SS7 to provide no greater utility than MF had provided unless and until a new application for SS7 could be developed that could ensure an equal or greater access revenue recovery, or provide a new revenue stream for the BOCs. When it became possible to generate additional revenue by rolling out new SS7 parameters, the BOCs did so promptly. Thus, the BOCs delay implementation of a new capability until they need it for their own "retail" services or are otherwise convinced that it will generate increased revenues.

18. The BOCs' priorities are reflected in the enthusiasm they bring to the implementation of new capabilities that benefit themselves rather than their access customers. For example, during the time when MCI's TNS request was pending, other SS7 signaling information (that had not been delivered using MF) was being considered by the BOCs because it was projected to generate additional BOC revenue. In an SS7 implementation article written in July 1990, BellSouth addressed SS7 interconnection with interexchange carriers and the potential for delivering the Calling Party Number (CPN) parameter, which could lead to additional revenues. BellSouth's discussion of CPN reveals why the implementation of CIC delivery has been so slow, since BellSouth makes it clear that CPN, unlike CIC delivery, would immediately make it possible to generate additional revenue from IXCs using new signaling applications. The BOCs could get double revenue enhancement duty out of CPN -- not only through additional compensation for its delivery to IXCs, but also because CPN delivery to IXCs and its subsequent presentation to the called party would enhance the BOCs' own new applications, e.g., BellSouth's TouchStar service. BellSouth states:

[t]he billing issues that must be resolved deal with transporting additional parameters across network interfaces, specifically the Calling Party Number (CPN). The issues surrounding CPN deal with whose information it is and who compensates whom for delivering this information. The CPN will be used by Local Exchange Carriers to provide the TouchStar features discussed next. Additionally, ICs have either existing or planned services that currently use the Automatic Number Identification (ANI) in conjunction

with record retrieval or network management applications. The CPN frequently provides a more accurate identification of the calling party and as such could be used in these as well as other applications.<sup>14</sup>

In other words, CPN delivery could be a compensatory item and implemented when the BOCs worked out the billing issues for charging the IXCs receiving this information. Hence, the delivery and timing of capabilities appears to depend upon the BOCs' financial or business strategies, rather than customers' needs.

19. The "CIP vs. TNS" issue provides a useful illustration of the way in which BOCs respond to interconnection capability requests from other industry segments, whether IXCs or ESPs. That issue involved only one SS7 parameter; yet the availability of CIC information is still uncertain after seven years of industry activity. When this experience is applied and extended to enhanced service providers trying to plan for Long Term Network Unbundling capabilities, the uncertainty of availability becomes significantly compounded.

# DESPITE BELLCORE CLAIMS TO THE CONTRARY, THE GENERIC REQUIREMENTS PROCESS IS A QUASI-PRIVATE STANDARDS-SETTING PROCESS

20. Bellcore takes exception<sup>15</sup> to Guggina's comment that the generic requirements process is a private standards-setting process. The situations described above and in the Guggina Affidavit attached to MCI's Comments, however, demonstrate that the end result of Bellcore's generic

<sup>&</sup>lt;sup>14</sup> IEEE Communications magazine, a publication of the IEEE Communications Society, July, 1990 issue, Volume 28, No. 7, page 58.

<sup>&</sup>lt;sup>15</sup> Bellcore Reply Comments at 9.

requirements process is indeed private and essentially just another standards-type document. Even though Bellcore revised its requirements process in 1994. 16 the end result has been the same. Bellcore has touted the benefits of the new process -- supposedly to better serve the industry by soliciting industry input earlier in the process to facilitate planning, clarify client (i.e., BOC) needs, and identify issues. Experience shows, however, as pointed out in the Guggina Affidavit, 17 using Bellcore's Screen List Editing (SLE) service requirements as an example, that Bellcore's client needs do not always incorporate the needs of the BOCs' customers. When MCI and other interexchange carriers at the ICCF requested that the BOCs revise the SLE requirements to allow equal access routing of SS7 TCAP messages, the BOCs, without considering these inputs, unilaterally refused to address the issue, based on their contention that the routing of these messages was a BOC business decision. The BOCs also later refused to address this issue at the CLC 19

21. Hence, BOC directions to Bellcore as to their needs are not determined by customers' requests but, rather, are based on the selective business decisions and strategies of the BOCs. They ask the industry what they

<sup>&</sup>lt;sup>16</sup> Bellcore made a presentation at ICCF #31 (March 16-17, 1994) and at a Network Reliability Council meeting (April 25, 1995) describing Bellcore's revised generic requirements process.

<sup>&</sup>lt;sup>17</sup> P. Guggina Affidavit attached as Exhibit B to MCI's Comments at 40.

<sup>&</sup>lt;sup>18</sup> TCAP messages are SS7 Transaction Capability Application Part messages. The TCAP protocol is referred to as non-call associated signaling used to support switch-to-switch and switch-to database communications.

<sup>&</sup>lt;sup>19</sup> The record of the ICCF concerning the TCAP Screen List Editing message routing issue is attached as Attachment VII (ICCF #30, November 17-18, 1993), and Attachment VIII (ICCF #31, March 16-17, 1994).

want, to provide comments and interact with Bellcore on the technical document; then the BOCs unilaterally decide what the industry will get. Only the BOCs have authority over Bellcore on what to include or not include in the Bellcore specifications. Thus, a private standards process results. Although the industry is ostensibly involved, the BOCs have the final say -- no voting, no consensus, only the BOCs' selective decision.

## CONCLUSION

and other industry fora cannot be used to delay the development and implementation of capabilities needed by non-BOC industry segments. The CIC delivery issue is an example of actions that are all too frequent in the industry fora when capabilities and others' needs are counter to the business strategies of the BOCs. The BOCs are able to dominate and control the outcome of issues. Even when agreements are reached in the standards or fora on issues, the good faith of the BOC negotiations resulting in such agreements is questionable, because the BOCs implement capabilities selectively, or not at all. The generic requirements process used by the BOCs, and the examples of MF-SS7 CIP interworking and the Screen List Editing service discussed in this affidavit further

demonstrate how BOCs can control implementation to suit their business interests. Years can be spent trying to obtain capabilities, with no positive outcome.

Further Affiant saith not.

James D. Joerger

Subscribed and sworn to before me this 4th day of 1996

Notary Public

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ATTACHMENT I

Date: Wed Jan 24, 1996 4:49 pm CDT From: Bob Edgerly / MCI ID: 538-5670

TO: \* Jim Joerger / MCI ID: 445-4263
Subject: Update - Consolidated status on CIP
Message-Id: 83960124214938/0005385670ND2EM

Latest on LEC support for CIP.

-Bab

v 227-6355

Ameritech Tariff Date: Effective 6/20/95
----- Pricing Structure: Per Trunk Group

Cost: \$40 NRC; \$6 RC/Month

1st Year Cost: \$92,736.00 Subsequent Annual Cost: \$59,616.00

Bell Atlantic Expected filing date: Early 1996
----- Pricing Strucutre: Per Trunk
Coat: S1 50 PC Mon

Cost: \$1.50 RC/Month

Annual Cost: Approx. \$1.6M (still negotiating)
CR told BA we would NOT purchase

CIP at this rate.

BellSouth Tariff Date: Effective February 25, 1996

------ Pricing Structure: Per Trunk
Cost: \$.28 RC/Month

Annual Cost: Approx. \$364K. MCI will file against this rate on 1/26.

CinnBT Tariff Date: Effective January 4, 1996

----- Pricing Structure: Per Trunk Group
Cost: \$200 RC/Month

Annual Cost: \$62,400

Aunual Cost: 502,400

GTE / GTOC Tariff Date: Effective November 30, 1995

----- Cost: Free

Pacific Bell Expected filing date: April 1996
----- Pricing Structure: Per Trunk Group
Cost: \$45 RC/Month

Annual Cost: Approx. \$250K-270K

NYNEX Has not committed to implement, proposed costs

were very high. Still pushing....

SBC (SWBT) Expected filing date: Early 1996
----- Pricing Structure: Per Call

Cost: \$.0007 per call

Annual Cost: Approx. \$1.5M (still negotiating)

CR told SBC we would NOT purchase

CIP at this rate.

SNET Now willing to consider providing based on most

recent "sales pitch" for NCM. Looking at the costs.

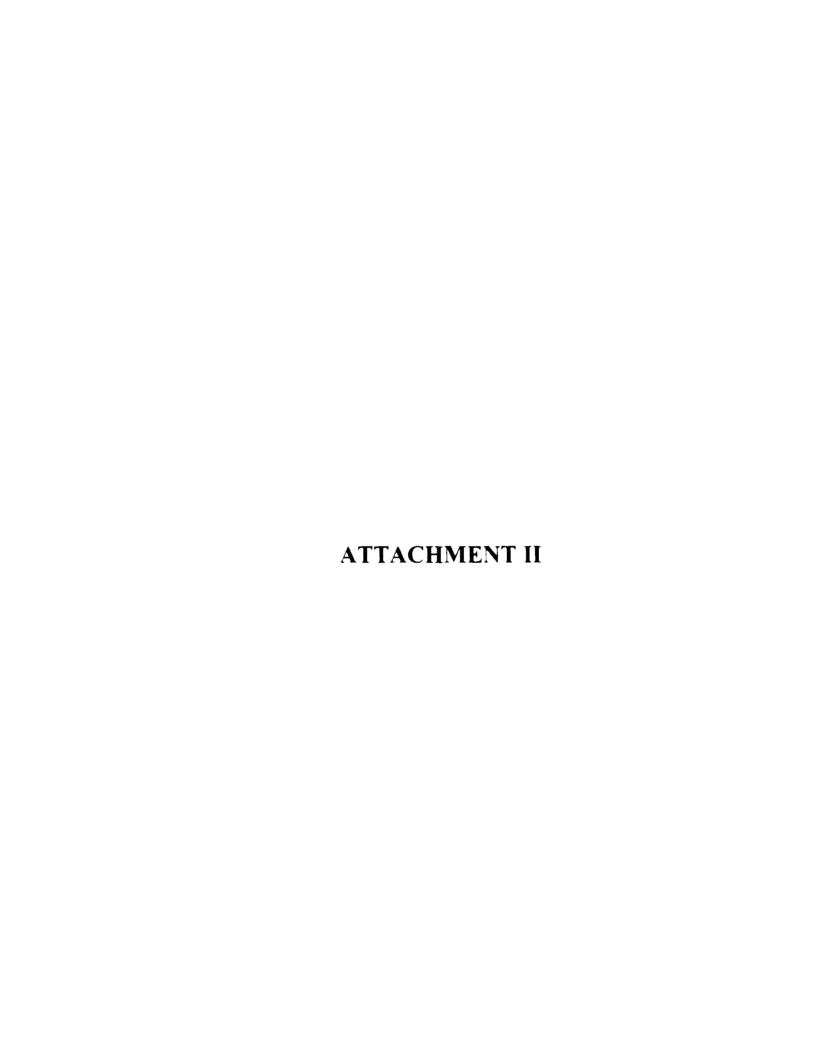
Sprint-LTD Tariff Date: Filed Jan. 16, Effective March 1

----- Estimated Cost: Free

USWest Plans to implement, but still examining the costs.
---- Did present MCI with a cost proposal which was

unacceptable (\$1.6M/year). USWest doing further CIP market

research and working with their vendors to reduce cost....





### **ALLTEL SERVICE CORPORATION**

100 Executive Parkway • Hudson, Ohio 44236-1105 Phone (216) 650-7000

#### CORPORATE CARRIER RELATIONS

April 22, 1988

Mr. Peter Guggina MCI TELECOMMUNICATIONS CORPORATION 8283 Greensboro Drive McLean, Virginia 22101

Dear Peter:

Based on current information that ALLTEL has accumulated from the manufacturers and our concern for deviation of "Industry Standards", we are declining your request to "TEST" a FG-D with CIC.

Wayne Zwald, Vice President-Network, is willing to have an informal meeting with you following our CLC meeting in May to discuss this subject in more detail.

Yours truly,

L. Craig Schaeffer

Director-Carrier Relations

amh

cc: Wayne Zwald



LAURENCE A. YOUNG

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1900 Bast God Filiko khaumburg i kili ili 19 310 Bill 2044

February 15, 1988

Mr. Peter Guggina MCI Telecommunications 8283 Greensboro Dr. McLean, Virginia 22102

Dear Peter,

Jack Saylors has requested that I respond to your Carrier Identification Code (CIC) questions.

Q1. Can CIC information be transmitted with ANI on FG D originating calls from end offices connected via direct or tandem trunking arrangements to the MCI POP?

Response: No

Q2. If the end office has the capability to transmit the CIC, can the access tandem forward the CIC to MCI with the ANI?

Response: No, the CIC is used when the end office signals the tandem office but only for the purpose of selecting the proper FG D access service to the IC. It is not included in the billing information sequence (ie. KP + II + ANI + ST). The protocol is described in Technical Reference TR-NPL-000258.

Q3. What happens to the CIC information in the end office?

Response: The CIC information is used only to determine the end users pre-subscribed interexchange carrier, thus allowing down stream billing and routing via a tandem as described above; or the selection of a direct FG D access service to the IC. This is described in the LSSGR TR-EOY-000064 section 20-24-0000, commonly referred to as the FSD - Feature Specification Document.

If MCI is interested in a feature where the CIC would be included as a part of the billing information stream vendor development would be required.

Please call me if you require further information.

Laurence A. Yound
Director - Technical Liaison

cc: Mr. J. Saylors
Mr. T. Appenzeller
Ms. S. Platner

Ms. A. Cullather



George L. Edwards

Munic<mark>ang D</mark>irector To J. Aelat (no et bl.)

February 23, 1988

Mr. Pete Guggina MCI Communications Corporation 8283 Greensboro Drive McLean, Virginia 22102

Dear Mr. Guggina:

This is in response to your January 11, 1988 request for information about the availability of providing Carrier Identification Code (CIC) information with Automatic Number Identification (ANI) on Feature Group D originating access service.

Bell Atlantic's equal access end offices (EAEO) and the Access Tandem (AT) cannot forward the CIC code to the IC. The feature requirements of the EAEO and AT, as specified in the following two documents, do not provide for such a capability:

- 1) TR-TS4-000530, Issue 2, July, 1987; and,
- 2) FSD20-24-0000, specifically the section on InterLATA Carrier/International Carrier Interconnection.

To obtain the technical specification documents detailing this, contact:

Bell Atlantic Research, Inc. 60 New England Avenue Piscataway, New Jersey 08854-4196 Attn: Document Coordinator (201) 699-5800

If you have further questions regarding this matter, please contact me or Steve Collins on 974-5798.

Sincerely,

52 Cavara



Robert E. Ingails. Jr

BBBC Ferrir Street Alsomitted Lendon of Monarchine Annies En

May 3, 1988

Mr. Peter Guggina MCI Telecommunications Corporation 8283 Greensboro Drive McLean, Virginia 22102

Dear Peter,

I am writing as a follow-up to our meeting on April 25 regarding CIC information. The open questions from the meeting were:

- 1.) Can Bell Atlantic extend the trial to individual applications on a Special Assembly basis?
- 2.) What is the time frame required to incorporate CIC information in the MF signalling environment?
- 3.) Does NTI's update to BCS2& help #2?
- 4.) What is the status of CIC information in the SS7 environment?

#### The answers are:

- 1.) The trial can be performed as explained on April 25, however, it cannot be extended to multiple applications on a Special Assembly basis. Development work would be required as the capability to provide this feature to all interested ICs would be necessary.
- 2.) The time frame for incorporating CIC in MF signalling is two to four years as described on April 25.
- 3.) It has been confirmed that the NTI Access Tandems can be equipped to forward CIC codes to the IC. However, Bell Atlantic does not have this capability in place. Since less than 20% of the BA Access Tandems are NTI switches, adding that capability would appear to provide only a limited capability to MCI.